

REMARKS

By the present response, no claims have been added, amended, or canceled. Accordingly, claims 1-6, 9-21, 23, 25, 27-31, 33-46, 49-56, 59-71, 73, 75, 77-81 and 83-86 remain in the present application.

In the Office Action mailed January 25, 2008, the Examiner allowed claims 14-21, 23, 41-46, 49, 50, 64-71 and 73, rejected claims 1-6, 9-13, 25, 27-31, 33-37, 51-56, 59-63, 75, 77-81 and 83-86, and objected to claims 38-40.

Applicant respectfully responds to this Office Action.

A. Rejection under 35 USC 103(a)

The Examiner has rejected claims 1-5, 9-13, 51-55 and 59-63 under 35 USC 103(a) as being unpatentable over Brunner et al (US 6567462), in view of Lomp et al (US 5799010). The Examiner has also rejected claims 25, 27-31, 33, 37, 75, 77-81, 83 and 86 under 35 USC 103(a) as being unpatentable over Furukawa et al (US 6414985), in view of Lomp. The Examiner has also rejected claims 6 and 56 under 35 USC 103(a) as being unpatentable over Brunner, in view of Lomp, and further in view of Sakoda (US 6909704). The Examiner has also rejected claims 34-36, 84 and 85 under 35 USC 103(a) as being unpatentable over Furukawa, in view of Lomp, and further in view of Brunner. Applicant respectfully disagrees and requests reconsideration in light of the following remarks.

The Examiner acknowledges that Brunner fails to disclose “coherently combining different portions of the product values to produce a plurality of coherent sums each comprising one of the first correlation values,” as set forth in independent claims 1 and 51 (see p.3 of the Detailed Action). The Examiner cites Lomp as purportedly disclosing this feature. Applicant respectfully submits that the cited portion of Lomp (Fig. 4, elements 404 and 406; and col. 29:32-38) fails to disclose this limitation.

Specifically, the cited portion of Lomp discloses a Median Weighted Tracking Method, wherein the combined signal magnitudes of the early and late signals are used to generate an error signal so the system can track the median of a group of multipath signals. The goal of the system is to obtain an error signal of zero, which happens when the magnitude of the combined

signal energy of the early signals is equal to the magnitude of the combined signal energy of the late signals. The system creates these magnitudes with calculator 406, which reduces the data to its absolute value before combining the absolute values in summer 408 (col. 29:18-50).

Thus, the cited portions of Lomp are incapable of “coherently combining different portions of the product values to produce a plurality of coherent sums each comprising one of the first correlation values,” as set forth in claims 1 and 51 because the combination of energy magnitudes cannot “produce a plurality of coherent sums,” as set forth in Applicant’s Specification. For example, Applicant’s Specification, paragraph [0032], clearly states that “coherent integration means that the phase information is preserved in the summation process” (emphasis added). By reducing the signal information to only its magnitude before summation, the phase information is necessarily lost, which prevents obtaining coherent sums, as required by claims 1 and 51.

Regarding independent claims 25 and 75, the Examiner relies on Lomp to show producing a plurality of coherent sums by combining portions of the product values (see p.5 of the Detailed Action). Applicant asserts that comparing the combined magnitudes of early and late signals to create an error signal, according to the cited portions of Lomp, is not the same as producing “correlation values comprising at least one partial coherent sum,” as required by independent claims 25 and 75.

Accordingly, Applicant respectfully submits that independent claims 1, 25, 51 and 75 are patentably distinct over the cited references of record. Allowance of claims 1, 25, 51 and 75 and their corresponding dependent claims is respectfully requested.

B. Allowable claims

Claims 14-21, 23, 41-46, 49, 50, 64-71 and 73 stand allowed. The Examiner has also indicated that claims 38-40 would be allowable if rewritten in independent form, incorporating the limitations of the base claim and any intervening claims. Applicant appreciates the Examiner's statement of allowable subject matter in these claims.

CONCLUSION

In view of the foregoing, applicant submits that all pending claims in the application are patentable. Accordingly, reconsideration and allowance of the present application are respectfully requested. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

No fees are believed due in connection with the present submission. However, if it is determined that fees are due, the Commissioner is hereby authorized to charge payment of any fee(s) or any underpayment of fee(s) or credit any overpayment(s) to Deposit Account No. 17-0026. If necessary, Applicant requests, under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above-identified application and to charge the fees for a large entity under 37 CFR 1.17(a).

Respectfully submitted,

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